



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

Meeting Minutes for August 9, 2001

Members in Attendance:

Mark P. Smith	Designee, EOE
Richard Thibedeau	Designee, DEM
Mark Tisa	Designee, DFWELE
Marilyn Contreas	Designee, DHCD
Glenn Haas	Designee, DEP
Bill Blanchard	Designee, DFA
Richard Butler	Public Member
Frank Veale	Public Member

Others in Attendance:

Linda Marler	DEM
Michele Drury	DEM
Lorraine Downey	MWRA
Laura Harrahy	NepRWA
Jackie Murphy	EOEA
James Miller	Town of Stoughton
Ernest T. Williams	Town of Canton
Maura Callahan	Earth-Tech
Steve Garabedian	USGS
Jonathan Yeo	MWRA
David Brew	MWRA
Lorraine Downey	MWRA
Gerard Kennedy	DFA
Leo Potter	Town of Foxborough
Eileen Simonson	WSCAC
Anthony Zuena	SEA Consultants
Sarah McConnell	SEA Consultants
Nina Danforth	DEM
Vicki Gartland	DEM

Agenda Item #1: Executive Director's Report

- Smith updated the WRC on a meeting with the irrigation industry regarding the lawn and landscape guidance and policy. The industry had some concerns, especially as to whether some communities could ban these systems. They also had technical comments with the guidance. We decided that it might be better to send out both the guidance and policy as drafts, so we can have a public discussion on these issues.

- The Lakes and Ponds Implementation Committee rolled out a demonstration program. This program will provide grants for three-to-five projects. We've received 24 applications, which are now being reviewed by the committee. These will be high visibility projects. The grants will be awarded in September.
- The report on wastewater systems grandfathered under the Interbasin Transfer Act is in the mailed package. This will be shared with the wastewater task force. If the WRC members have any comments, please share them with us after you've read the report.

Marler provided an update on the hydrologic conditions:

- In July, rainfall was normal in most areas, however western Massachusetts and the Connecticut Valley regions were only about 76% of normal. Overall, all regions are above 90% of normal for the water year.
- Groundwater and streamflow levels are normal or above normal. In July and August, precipitation is variable, so we'll see a lot of variability as far as recharge is concerned, but streamflow in rivers is right about normal. This is the same with reservoirs (all are about 90%, or higher, of full).
- Fire conditions have been mild, due to high humidity
- Forecasts are for normal conditions, but Southern New Hampshire has headed to a drought warning status. This could creep our way. We'll be monitoring the situation.
- There should be an active hurricane season.

Agenda Item #2: Vote on the Minutes of July 12, 2001

Butler moved and Veale seconded a motion to accept the minutes of July 12, 2001. The vote was unanimous of those present, with one abstention.

Agenda Item #3: Presentation on Canton's Compliance with the Conditions of the Interbasin Transfer Approval of Well #9

Smith acknowledged Canton officials present at the meeting. Drury stated that the Commission is being asked for a vote on Canton's compliance with certain conditions. The Interbasin Transfer application was approved in January 1998. The WRC was updated in November 1999 concerning certain conditions that Canton had complied with and WRC voted then that those particular conditions had been met. Still, there were outstanding conditions to be met before the well could be installed. These included a scope for a Comprehensive Wastewater Management Plan which was approved by DEP on June 11, 2001. The WRC also required that Canton revise its 2:1 I/I removal plan, by adding a timeline. This was furnished on June 15, 2001. Staff recommends that Canton has complied with the conditions for installing the well. There are still conditions to be met before any water can be pumped and ongoing reporting conditions.

Williams thanked the WRC for their consideration and staff for all their work.

V O T E	Contreas moved with a second by Butler to approve Canton's compliance with the outstanding conditions of its approval for Well #9 in order to allow it to move forward with installation of the well. The motion passed by unanimous approval of those present.
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Agenda Item #4: Request for Additional Information under the Interbasin Transfer Act for Stoughton's Request for Admission into the MWRA Water Works System

Drury stated that Stoughton had submitted the DEIR/IBT application in early June of this year. In 1999, the WRC denied Stoughton's application for an IBT from the proposed Cedar Swamp well field. At that time, the WRC acknowledged that Stoughton had exhausted all local water supply sources and would need to look out of basin to meet its future water supply needs. Stoughton has land area in the Taunton River basin, the Neponset River basin and a small area in the Weymouth/Weir River basin. The town has seven existing water supply sources, three in the Neponset and four in the Taunton. The estimated combined capacity of these sources is 2.15 mgd. The town has been under water supply emergency since 1987 and has had a water connection moratorium since 1983. They are proposing to purchase water from the MWRA to supplement existing sources. The MWRA's sources are in Chicopee and Nashua River basins.

The information being requesting includes more information on impacts to the MWRA system and clarifications on Stoughton's water conservation program. They have an extensive water conservation program, but staff is asking for a few more details. It is expected that this information will be provided in the FEIR. Once all the additional information is received, and the Secretary issues the certificate on the FEIR, the WRC will have 60 days to hold public hearings on the application; then Staff will make a recommendation to approve or deny the application.

Drury acknowledged Jim Miller from Stoughton. Smith pointed out that this is the first case to come in under the new MEPA regulations which require that all significant IBTs submit a mandatory EIR. This will help streamline the process. Stoughton went through a tough local process to get to this point. Veale asked if this meant that Stoughton was no longer considering Bluestone. Miller stated that town meeting voted to join the MWRA, rather than pursuing Bluestone. Miller extended thanks to staff for all the work that as been done in past.

Agenda Item #5: Discussion of the Staff Recommendation/Draft Decision for the Foxborough Witch Pond Wells

Smith stated that Foxborough had asked that we postpone discussion of this proposal after the May presentation, while they raised issues on some of the conditions of the staff recommendation. Staff also is presenting a response to the comments received. There will be a vote on the project next month.

Drury acknowledged the Foxborough officials. She reminded the WRC that in June 2000, the Commission approved the Mansfield Morrison well downstream of this site. The staff recommendation on Foxborough's application was first presented on May 10, 2001. A public hearing on the Staff Recommendation was held on May 24th. The hearing was sparsely attended. In the package are the comments received. The main issue raised had to do with thresholds set to curtail pumping, mainly the surface water threshold. Foxborough requested a meeting to discuss this. The meeting was held on June 20th. After that meeting, all agreed that more information was needed on ground water and surface water interactions before any modifications would be made. Staff is recommending that the Town be required to carry out one year of baseline monitoring to get better understanding of area's complex hydrology. After an additional five years of continuous monitoring, when the Commission will have a better idea of the interactions,

Staff may consider making recommendations to the WRC about modifications to the thresholds. Foxborough has sent a letter committing to meet the conditions of the decision.

Background

Foxborough proposes to develop two wells adjacent to Witch Pond. These wells are on the edge of an Atlantic White Cedar swamp, which is home to two rare and endangered species (Hessel's hairstreak and the spotted turtle). The wells are in the Ten Mile River basin. The Act is triggered because water from these wells will cross the basin line and town line for discharge in the town of Norton, in the Taunton River basin.

The application meets most of the applicable criteria and performance standards, but not all. The decision can be conditioned to require any deficiencies to be met before the wells are activated. The town has been proactive in identifying and protecting potential sources. DEP has stated that the Witch Pond wells are the only sources within Foxborough that are viable at this time. Staff has proposed conditioning the draft decision so that Foxborough will fully comply with all performance standards. Foxborough is in the process of developing a Comprehensive Wastewater Management Plan. Foxborough and Mansfield were required to evaluate existing and potential transfers (including each others).

Hydrology

Marler described the hydrology of the area. Lake Mirimichi is contributing flow to Witch Pond and the surrounding swamp. This flow will be intercepted by the wells. Analyses focused on impacts to the Atlantic White Cedar swamp, Witch Pond, ground water levels, and impacts on other users. The draft decision sets compliance water level thresholds and requires an ongoing monitoring program, including one year of baseline monitoring.

The proposal is for two gravel packed wells, set in a sand and gravel aquifer 50 feet deep below the swamp. Each well has a safe yield of 500 gallons per minute (gpm). The wells were evaluated on this capacity, but staff understands that DEP will be limiting use of the wells to 16 hours per day of operations at 500 gpm (on an average). Ground water flows from north to south. Bungay Brook exits Witch Pond and flows south to Route 95, where it is culverted. Lake Mirimichi's contribution of ground water helps sustain Witch Pond, even during drought conditions. There is a mild gradient between Witch Pond, the surface water of Bungay Brook and the bedrock lip that controls flow downstream. Staff evaluated both the Mansfield and Foxborough withdrawals together. Compliance thresholds can readily be met under average conditions. Under the 90-day drought conditions, the drawdown would be too severe (worst case). The thresholds may not be met, but this is an end of summer condition. The towns could rely on alternate supplies during these peak periods.

Thresholds

Staff has recommended three types of ground water thresholds: in the aquifer, close to the wells; in the aquifer close to Witch Pond; and a threshold in the peat layer at the closest point to the wells. Peat under the swamp is expected to buffer impacts to the swamp. It is important to protect Witch Pond because the wells may be intercepting ground water that would otherwise replenish Witch Pond. Because of the mild hydraulic gradient, it would not take much drawdown to stop flow to Bungay Brook altogether. Another factor is that the pond needs to be protected because it is habitat for the spotted turtle and a variety of fish species. It is shallow;

one foot of drawdown would eliminate 25% of the surface area. The habitat is already fragile and shouldn't be disturbed further.

Comments

Staff received three public comments on the Staff Recommendation: two were from the Foxborough Water & Sewer Commission and one was from Mansfield. Most comments had to do with the surface water threshold. This has been resolved for now, but if Staff get more information, they can reconsider threshold levels. This is an important issue for town. The consultants for both Mansfield and Foxborough showed that there a strong relationship between flow in Bungay Brook as it exits the subbasin and water level in the Brook. Below 0.1 cfs, flow diminishes rapidly. Flow, as measured at Route 95, stops when Bungay Brook's level near Route 95 is at 153.9 feet. There is a sparse amount of data showing Bungay Brook flow measurements coincident with water levels in Witch Pond. These were made during 1999 (a dry summer). Below 0.1 cfs, the elevation in Witch Pond was 154.2 feet. That was the basis for the threshold in Witch Pond. Below that level, the flow exiting Bungay Brook diminishes rapidly. Staff only have sparse data, and because of the mild gradient, Staff are being conservative in recommending the surface water threshold for Witch Pond at 154.2 feet. This will maintain the pond's ability to contribute flow to Bungay Brook. Rainfall also contributes to the stream. But from the small amount of data available, it appears that Witch Pond levels don't seem to fluctuate much from wet to dry conditions.

Smith stated that the town is concerned that this threshold will require them to shut off their wells sooner than Mansfield would or sooner than other surface water levels would be reached. They also fear that Pond would fluctuate naturally below this level and therefore their well would be shut off even if their well wasn't causing the fluctuation. That's why Staff agreed more data is needed. Until the data is available that would allow a change in threshold, Staff has recommended this level as protective of the stream.

Tisa stated that the Commission needs to be concerned about the frequency of how often the stream dried up. We need to make sure that this will not cause the frequency to increase. Smith stated that Staff agrees with that point, and that's why we are taking a hard line. The town agrees that we need more data, so they will be collecting it. Our levels are set to be protective. It doesn't mean that the levels won't vary naturally.

There will be a vote at the next meeting. Smith asked members to get any additional questions or comments to Drury. Thibedeau stated that this application was the most challenging we've had in the 15 years we've been administering the ITA.

Agenda Item #6: Presentation and Vote on DEP's Industrial Wastewater Holding Tank Regulations

This item was tabled as John Reinhardt, DEP, was not in attendance.

Agenda Item #7: Presentation on ending the two year grace period under the Interbasin Transfer Act Performance Standards

Smith reminded the WRC that in 1999, the IBT performance standards were passed. Potential applicants were given a two year grace period where, if all the criteria were not met before being approved, the WRC could condition the approval so that the applicant met the criteria before

they installed the well, but the application would not be held up. The grace period ends this August; therefore, applicants will need to meet the performance standards before they apply.

Drury stated that since the last meeting, this was put into the form of a draft policy for the WRC to vote on. She reminded the WRC that passage of the performance standards was in response to a lawsuit brought against WRC because we were conditioning approvals so that the criteria would be met after approval, but before use of well, and the law says that all actions must be taken before an IBT application can be approved. The sense of the WRC in 1998-1999 was that this was going to stop after we passed the performance standards. Staff is reviewing some applications that were received before the end of grace period. These can still be conditioned at time of approval, but all others must meet performance standards at time of approval.

There are still two instances where the WRC would condition an approval if it did not meet performance standards: if the actions required to meet the criteria and a timeline to accomplish this were in an emergency declaration or enforcement order; or if local conditions precluded meeting the criteria as prescribed and the applicant could demonstrate an alternative method to meet the criteria. All performance standards reflect the eight criteria under IBT regulations, so this is nothing new. The performance standards outline the pathway to get approval. In addition, proponents who don't meet the two conditions just described, or don't provide documentation to show they have met the performance standards, will have their applications judged as incomplete, until they have provided the required documentation. If they clearly have not taken the actions required, Staff will try to discourage them from applying until they have, and if they insist on applying even though they haven't completed the required actions, staff will have to recommend to the WRC that the application be denied without prejudice. The proponent could reapply once they meet performance standards.

At the last meeting, it was suggested that Staff submit an article for DEP's In the Main and the NEWWA newsletter, to get the word out about the end of the grace period. This has been done. Staff will also post this on the IBT web site. Smith stated that the performance standards have already been helpful to applicants. There will still be environmental conditions and ongoing monitoring conditions associated with approvals. Haas stated that it should be clear that after August 12, 2001, all new applications received should meet the performance standards.

V O T E	Haas moved with a second by Veale to approve the WRC policy on compliance with the IBT performance standards, as amended.
	The motion was approved by unanimous vote of all present.

Agenda Item #8: Guidance on cost comparison for the Development of In-basin Sources and Water Rates to Encourage Conservation

Smith reminded the WRC that this issue was brought up about a year ago. It is related to the performance standards. The IBT regulations state that a proponent needs to have a rate structure that encourages conservation. It was suggested that we come up with guidance to demonstrate that an in-basin source is not viable for economic reasons. Staff brought this to the WRC in early 2000, and then sent it out for comments, which were received from DEP, WSCAC, and CRWA. These are included in the package.

Regarding rate structures, a proponent should list the funding sources and what they cover. People are encouraged to have an enterprise account and to fully fund the system through rates. The guidance asks what the other sources of funding are (i.e., what's not covered by rates?). The proponent should provide their rate structure and how recently it was updated. They need to break it out by residential, commercial, and industrial rates, etc. Do these encourage conservation? How? (This could be through increasing block rates, seasonal rates, second meter rates, etc.)

The viable local alternative guidance includes the current definition in regulations for viable local sources for water supplies and the definition for viable local sources for wastewater from the 1987 wastewater guidance. This piece will only be used if cost is an issue. If source is not viable for other reasons, this guidance will not be needed.

This guidance directs the proponent to look at cost in two ways: direct costs and life cycle costs. We also ask them to compare these costs (as required in the regulations) against other projects in the Commonwealth. Finally, the guidance asks about the impacts on rates. Large systems can absorb larger projects more easily (due to marginal costs, rather than incremental costs). EPA has a standard for wastewater projects which could be used as well. This effort is not aimed at setting a standard, but just providing tools to evaluate these projects.

Haas mentioned the discount rate will make a difference in the present value. He suggested that we just use the EPA discount rate. Some communities will put capital costs on rates, others may not. He is concerned that when we see rates, we won't be able to tell what the costs are. Smith said that the point is to give us enough information to make a decision. The proponent must make its case.

Simonson said source protection should be included in the rates. This goes directly to question of viability. Smith said that we will add this to the rate section. Gildesgame asked if this will be guidance or a policy. Smith said it will be a policy to be incorporated in the guidance.

New Business

- DEM has developed a definition of stressed basins. Staff still needs to do more work on habitat etc., but since there has been so much interest in using this definition, they want to make it an interim definition until all of our stressed basin work is finished. It will be brought back in September for a vote.
- There was an article in Commonwealth Magazine by a local consultant, Dan Garson, that criticizes the process for water supply permitting. We will include this in the next WRC mailing. Simonson said it was not a good article.
- Next month the presentation and vote on DEP's Industrial Wastewater Holding Tank Regulations will be back on the agenda.

Meeting adjourned

Minutes approved 9/11/03